

IN THE CLAIMS:

Claim 15 was previously cancelled. None of the claims have been amended herein. All of the pending claims are presented below. This listing of claims will replace all prior versions and listings of claims in the application. Please enter these claims previously as amended.

1. (Previously presented) A capacitive sensor for detecting a level of fluid in a container having an interior volume, the sensor comprising mutually cooperative first and second electrodes arranged for placement on the container in isolation from the interior volume of the container, wherein each electrode exhibits a two-dimensional area having a vertical dimension and a horizontal dimension, and wherein the first and second electrodes are arranged such that a majority of each of their respective areas are both vertically and horizontally offset from each other.
2. (Previously presented) The sensor of claim 1, wherein the first and second electrodes are arranged such that their respective areas are substantially both vertically and horizontally offset from each other.
3. (Previously presented) The sensor of claim 1, wherein the first and second electrodes are arranged such that their respective areas are completely both vertically and horizontally offset from each other.
4. (Original) The sensor of claim 1, wherein the first and second electrodes are vertically spaced from each other.
5. (Original) The sensor of claim 1, wherein the electrodes comprise substantially two-dimensional plates.

6. (Original) The sensor of claim 1, further comprising a conductor coupled to each of the first and second electrodes.

7. (Original) The sensor of claim 6, wherein the conductors coupled to each of the first and second electrodes are also coupled to control circuitry.

8. (Previously presented) The sensor of claim 7, wherein the conductors coupled to each of the first and second electrodes are coupled to the control circuitry through a Zero Insertion Force connector.

9. (Previously presented) The sensor of claim 1, further comprising control circuitry, wherein the control circuitry is configured to supply an oscillating signal having a frequency greater than 1 MHz to one of the first and second electrodes.

10. (Previously presented) The sensor of claim 9, wherein the control circuitry is configured to supply a signal at a frequency of at least about 4 MHz.

11. (Previously presented) The sensor of claim 10, wherein the control circuitry is configured to supply a signal at a frequency of at least about 8 MHz.

12. (Original) The sensor of claim 1, further comprising control circuitry configured to detect a change in a capacitance of the sensor.

13. (Original) The sensor of claim 1, further comprising at least one alarm responsive to an output signal of the sensor.

14. (Previously presented) The sensor of claim 1, wherein the first and second electrodes are horizontally spaced.

15. (Cancelled)

16. (Previously presented) The sensor of claim 1, wherein the first and second electrodes are arranged for placement on a wall of the container.

17. (Original) The sensor of claim 16, further comprising a mounting structure to which the first and second electrodes are affixed.

18. (Previously presented) The sensor of claim 17, wherein the mounting structure is a thin, electrically insulative film.

19. (Previously presented) The sensor of claim 18, wherein the thin, electrically insulative film is Mylar.

20. (Previously presented) The sensor of claim 1, wherein the first and second electrodes are placed within the wall of the container.

21. (Previously presented) A method for detecting a level of a fluid within a container having an interior volume, comprising:
placing a capacitive structure including first and second electrodes on a wall of the container in isolation from the interior volume of the container, wherein each electrode exhibits a two-dimensional area having a vertical dimension and a horizontal dimension and wherein the first and second electrodes are arranged such that a majority of each of their respective areas are both vertically and horizontally offset from each other;
driving the capacitive structure with an oscillating signal at a frequency of more than about 1 MHz and generating an output signal from the capacitive structure responsive thereto;
adjusting a fluid level within the container; and
detecting a change in the output signal responsive to the adjusting of the fluid level.

22. (Original) The method of claim 21, wherein placing a capacitive structure on a wall of the container comprises placing a capacitive structure within the wall of the container.

23. (Previously presented) The method of claim 21, wherein driving the capacitive structure with an oscillating signal at a frequency of more than about 1 MHz further comprises driving the capacitive structure at a frequency of at least about 4 MHz.

24. (Previously presented) The method of claim 21, wherein driving the capacitive structure with an oscillating signal at a frequency of more than about 1 MHz further comprises driving the capacitive structure at a frequency of at least about 8 MHz.

25. (Original) The method of claim 21, wherein placing the capacitive structure on a wall of the container comprises forming the capacitive structure on a mounting structure and affixing the mounting structure to an exterior wall of the container with adhesive.

26. (Original) The method of claim 21, wherein placing the capacitive structure on a wall of the container comprises forming the capacitive structure on the wall.

27. (Original) The sensor of claim 21, further comprising determining whether the output signal exceeds a reference signal.

28. (Previously presented) The method of claim 27, further comprising initiating at least one alarm if the output signal exceeds the reference signal.

29. (Original) The method of claim 28, wherein the at least one alarm is at least one of an audible alarm and a visual alarm.